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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,166	11/26/2003	Shigenori Yoneda	117866	5527
25944	7590	01/27/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			LE, DANG D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/721,166

Applicant(s)

YONEDA ET AL.

Examiner

Dang D Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/26/03 & 10/7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 5, 8, 11, 13-16 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stokes (5,570,503) in view of Puchy (2,278,139).

Regarding claims 1 and 16, Stokes shows a combination type stator core applicable to an electric rotary machine which is composed of a plurality of electromagnetic steel plates being multilayered so as to have a cylindrical yoke with numerous recessed portions (18) arranged at predetermined pitches in a circumferential direction and each opened toward an inner radial direction and a teeth block (26)

extending toward the inner radial direction with protruding portions coupled or fitted into said recessed portions of said yoke (12).

Stokes does not show:

- One or more teeth fixing pins provided to fix said teeth block to said yoke;
- Said yoke comprising first annular plates defining said recessed portions being opened toward both axial directions as well as toward the inner radial direction and second annular plates being disposed next to said first annular plates at axial end thereof and each having a shielding plate portion for shielding said recessed portions of said first annular plates in a lamination direction of said multilayered electromagnetic steel plates;
- Said teeth block comprising first teeth defining said protruding portions inserted in the radial direction and fitted into said recessed portions and second teeth each being disposed next to said first teeth in the axial direction so as to be brought into hermetical contact with a cylindrical surface of said second annular plates; and
- Said teeth fixing pin inserted in through-holes of said shielding plate portions of said second annular plates and through-holes of said protruding portions of said second teeth which are overlapped with each other in the lamination direction.

For the purpose of pre-wire the coil, Puchy shows:

- One or more teeth fixing pins (with through holes 20) provided to fix teeth block (11) to said yoke (10);

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- Said yoke comprising first plates (14 bottom) defining said recessed portions (15) being opened toward both axial directions as well as toward the inner radial direction and second plates (14, top) being disposed next to said first annular plates at axial end thereof and each having a shielding plate portion at (16) for shielding said recessed portions of said first annular plates in a lamination direction of said multilayered electromagnetic steel plates;
- Said teeth block (11) comprising first teeth (18) defining said protruding portions (19) inserted in the radial direction and fitted into said recessed portions and second teeth (17) each being disposed next to said first teeth in the axial direction so as to be brought into hermetical contact with a cylindrical surface of said second plates; and
- Said teeth fixing pin (25) inserted in through-holes (16) of said shielding plate portions of said second plates and through-holes (20) of said protruding portions of said second teeth which are overlapped with each other in the lamination direction.

Since Stokes and Puchy are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make a stator core with tooth blocks and annular yoke having protruding portions and recessed portions, respectively for engaging the tooth blocks with the annular yoke in a radial direction as taught by Puchy for the purpose discussed above.

Regarding claims 2, 8, 11, 13, and 20, it is noted that Stokes and Puchy also show all of the limitations of the claimed invention.

Regarding claim 3, neither Stokes nor Puchy shows a circumferential width of a radial end portion of said protruding portion is 98% or more of a circumferential width of a radial opening portion of said recessed portion. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make a circumferential width of a radial end portion of said protruding portion with 98% or more of a circumferential width of a radial opening portion of said recessed portion, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 5, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 14, 15, 21, and 22, neither Stokes nor Puchy shows the ratio with a range from 0.8 to 1.2 and a ratio  $R_x/R_y$  in the range from 1.0 to 1.5. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the ratio with the range 0.8 to 1.2 and the ratio  $R_x/R_y$  in the range from 1.0 to 1.5 for the purpose of connecting the teeth and the annular yoke, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stokes in view of Puchy and further in view of Cushman.

Regarding claim 4, the core of Stokes modified by Puchy includes all of the limitations of the claimed invention except for the protruding portions with increasing distance and the recessed portions with decreasing distance.

Cushman shows such feature in Figure 5 and Figure 3, respectively for the purpose of making the assembly easier.

Since Stokes, Puchy, and Cushman are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the protruding portions with increasing distance and the recessed portions with decreasing distance as taught by Cushman for the purpose discussed above.

5. Claims 6, 7, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stokes in view of Puchy and further in view of Ryder et al. (2,607,816).

Regarding claims 6 and 7, the core of Stokes modified by Puchy includes all of the limitations of the claimed invention except for the use of welding and offsetting the weld portions with the fixing pins in a radial direction.

Ryder et al. uses welding for the purpose of connecting the laminations together.

Since Stokes, Puchy, and Ryder et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to weld the tooth laminations and the annular laminations and to offset the weld portions with the fixing pins in the radial direction as taught by Ryder et al. for the purpose discussed above.

Regarding claims 12 and 19, it is noted that Ryder et al. also shows all of the limitations of the claimed invention in Figures 1 and 2.

6. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stokes in view of Puchy and further in view of Saban et al. (5,894,182).

Regarding claims 9 and 17, the core of Stokes modified by Puchy includes all of the limitations of the claimed invention except for the punch-out portions.

Saban et al. shows the punch-out portions for the purpose of locking the laminations.

Since Stokes, Puchy, and Saban et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the punch-out portions in the laminations as taught by Saban et al. for the purpose discussed above.

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7. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stokes in view of Puchy and further in view of Cox (4,071,793).

Regarding claims 10 and 18, the core of Stokes modified by Puchy includes all of the limitations of the claimed invention except for the terminal base.

Cox shows the terminal base (58) for the purpose of providing a connection of coil ends.

Since Stokes, Puchy, and Cox are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the terminal base as taught by Cox for the purpose discussed above.

***Information on How to Contact USPTO***

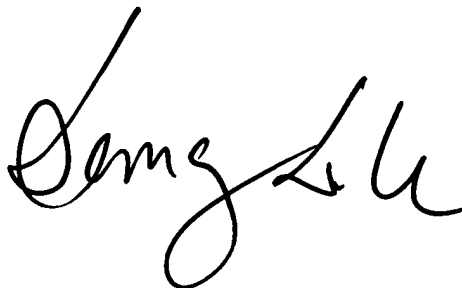
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/21/05

A handwritten signature in black ink, appearing to read "Dangle", written in a cursive style.

DANGLE  
PRIMARY EXAMINER